STATE OF CALIFORNIA
ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

IN THE MATTER OF:	)	Docket HWCA: P2-03/04-006
	)	
Pacific Gas & Electric Company	)	CORRECTIVE ACTION
Shell Pond and Carbon Pile Property	)	CONSENT AGREEMENT
696 West 10th Street	)	
Pittsburg, California 94565	)	
	)	
	)	Health and Safety Code
	)	Section 25187
Respondent.	)	
	)	

1.0 INTRODUCTION

1.1 The Department of Toxic Substances Control (DTSC) and Pacific Gas & Electric Company, (Respondent) enter into this Corrective Action Consent Agreement (Consent Agreement) and agree as follows.

1.2. Jurisdiction exists pursuant to Health and Safety Code section 25187, which authorizes DTSC to issue an order to require corrective action when DTSC determines that there is or may be a release of hazardous waste or hazardous waste constituents into the environment from a hazardous waste facility.

1.3. The parties enter into this Consent Agreement to avoid the expense of litigation and to carry out promptly the corrective action described below.

1.4. Respondent is the owner of a property located at 696 West 10th Street, Pittsburg, Contra Costa County, California (Facility).

1.5. Historical activities that occurred at the 696 West 10th Street (Shell Pond and Carbon Pile) property included disposal of carbon black solids to land and treatment of wastewaters in a surface impoundment pond. In 1973 PG&E had purchased this property which is located approximately 3 miles west of the former PG&E Pittsburg Power Plant. This property was purchased for potential future expansion. The Facility is bounded on the north by Suisun and Honker Bays, Criterion Catalyst Company (formerly Shell Oil Company) on the south, and wetlands/open space to the west and east.

1.6. The terms used in this Consent Agreement are as defined in California Code of Regulations, title 22, section 66260.10, except as otherwise provided.

1.7. Respondent agrees to implement all DTSC-approved workplans and to

undertake all actions required by the terms and conditions of this Consent Agreement, including any portions of this Consent Agreement incorporated by reference.

1.8. Respondent waives any right to request a hearing on this Consent Agreement pursuant to Health and Safety Code section 25187.

2.0 FINDINGS OF FACT

2.1. In September 1986, the United States Environmental Protection Agency (U.S. EPA) completed a RCRA Facility Assessment (RFA). The RFA identified 2 solid waste management units (SWMUs) on the Shell Pond and Carbon Pile property that either have released or may have released hazardous waste or hazardous waste constituents into the environment. The SWMUs are as follows:

Table 1- Summary of RFA Findings

Solid Waste Management Unit (SWMU) No.	Description	Further Investigation Required under RFI
4.12	Carbon pile area formerly used by Shell Oil Company for the storage of carbon slurry.	Yes
4.18	Surface impoundment formerly used by Shell Oil Company of wastewaters from an adjacent chemical plant.	Yes

2.2. Based on the RFA, DTSC concluded that further investigation was needed to determine the nature and extent of any release of hazardous waste or hazardous waste constituents for SWMUs 4.12 and 4.18. The Respondent prepared an RFI Workplan and Report, dated May 18, 1996 that characterized these SWMUs. The RFI report concluded that a Corrective Measures Study was required to evaluate remediation of these two SWMUs.

2.3.1.1. The hazardous waste and hazardous waste constituents of concern at the Facility included, but were not limited to, the following:

Metals: Antimony, Arsenic, Beryllium, Cadmium, Copper, Lead, Mercury, Thallium, and Zinc.

Volatile Organic Compounds: Benzene, Sec-Butyl benzene, Ethyl benzene, 1,2,4 – Trimethylbenzene, 1,3,5 – Trimethylbenzene, Toluene, and Xylene.

Semivolatile Organic Compounds: Acenaphthylene, Benzo(g,h,I)perylrene, Benzo(g,h)pyrene, Benzo(a)pyrene, Indeno (1,2,3,c,d,)pyrene, Naphthalene, Phenanthrene, and Pyrene.

2.4. Hazardous wastes or hazardous waste constituents have migrated or may migrate from the Facility into the environment through the following pathways: soil, groundwater surface water, sediment, and air.

2.5. On March 22, 1996, Respondent submitted the Corrective Measures Study Workplan for SWMUs 4.12 and 4.18 (Shell Carbon Pile and Pond). On December 21, 1996, the DTSC approved the Corrective Measures Study Workplan for these two SWMUs.

2.6 On September 19, 1997, Respondent submitted the Excavation Workplan that identified an interim action to remove source materials in an area of SWMU 4.12 in advance of scheduled pipeline work. Contaminated materials were excavated and disposed of at authorized hazardous waste disposal facilities. The area was graded and backfilled with clean soil.

2.7 On May 28, 1998, Respondent submitted the Summary of Excavation Activities documenting the completion of the interim action measure.

2.8 On December 31, 1998, Respondent submitted the Corrective Measures Study (CMS) Report for SWMUs 4.12 and 4.18 (Shell Carbon Pile and Pond). Based on DTSC's comments, Respondent revised the Human Health Risk Assessment (HHRA) component of the CMS Report and resubmitted the HHRA on April 5, 2000. On January 26, 2000, the DTSC approved the CMS Report.

2.9 On June 15, 2000, a 45-day public comment period was held on the proposed corrective action remedy selection for SWMUs 4.12 and 4.18 (Shell Carbon Pile and Pond). On September 1, 2000, the DTSC approved the proposed corrective action remedy.

2.10 The approved remedy for the Shell Pond/Carbon Pile property consists of the following four elements:

a. Site vegetation surveys, re-vegetation, and levee inspection and maintenance under the oversight of the Department of Fish and Game.

b. A circulation system to gradually reduce the salinity of water in the Shell Pond (SWMU 4.18) . Pond water and effluent sampling are in accordance with the parameters specified in the San Francisco Bay Regional Water

Quality Control Board – NPDES Permit No. CA0030082.

c. Groundwater monitoring wells at SWMU 4.12 (Carbon Pile) to evaluate if have been releases of hazardous substances to groundwater. This evaluation is performed in the Annual Report.

d. A deed restriction to be placed on the title of the property prohibiting residential development.

2.11 On October 15, 2001, Respondent submitted the PG&E / Shell Pond Revised Pond Management Plan, Bay Point (Formerly West Pittsburg), in accordance with Waste Discharge Requirements Order #99-022 and NPDES Permit #CA0030082, to the DTSC and the RWQCB. This workplan and related implementation documents constitute the Circulation System Corrective Measures Implementation phase for SWMU 4.18.

2.12 On July 12, 2002, Respondent submitted the Well Installation and Monitoring Workplan for Corrective Measures Implementation for SWMU 4.12. The workplan is currently under review by the Department. The RWQCB has verbally approved the plan on July 22, 2002 and it is being implemented.

3.0 PROJECT COORDINATOR

3.1 Within (10) days of the effective date of this Consent Agreement, DTSC and Respondent shall each designate a Project Coordinator and shall notify each other in writing of the Project Coordinator selected. Each Project Coordinator shall be responsible for overseeing the implementation of this Consent Agreement and for designating a person to act in his/her absence. All communications between Respondent and DTSC, and all documents, report approvals, and other correspondence concerning the activities performed pursuant to this Consent Agreement shall be directed through the Project Coordinators. Each party may change its Project Coordinator with at least seven days prior written notice to the other.

4.0 WORK TO BE PERFORMED

4.1 Respondent agrees to perform the work required by this Consent Agreement in accordance with the applicable state and federal laws, their implementing regulations, and the applicable DTSC and the U.S. EPA documents. Table 2 provides a summary of the work required under this Consent Agreement

Table 2 - Summary of Work Activities

Activity Number	Work Activity	Due Date from Effective Date of This Consent Agreement or Specified Date
1	Site revegetation workplan that will or has been submitted to the Department of Fish & Game.	Within 60 days of the effective date of this Consent Agreement.
2	Implement site revegetation workplan.	Within 30 days of the approval of the site revegetation workplan by the Dept. of Fish and Game.
3	Levee inspection and maintenance workplan that will or has been submitted to the Department of Fish and Game	Within 60 days of the effective date of this Consent Agreement.
4	Implement levee inspection and maintenance workplan.	Within 30 days of the approval of levee inspection workplan by the Dept. of Fish and Game.
5	Copies of all reports required by the Regional Water Quality Control Board NPDES Permit No. CA0030082 for Shell Pond circulation system	Same submittal schedule as specified by RCWQCB NPDES Permit No.CA0030082.
6	Provide copies of groundwater monitoring reports.	In accordance with groundwater monitoring workplan to be approved by DTSC .
7	Draft land use restriction covenant on the title of the property prohibiting residential land use	DTSC to provide first draft of land-use covenant within 60 days of the effective date of this Consent Agreement. PG&E to review draft land-use covenant and provide comments within 45days of submittal by DTSC. PG&E to execute the final land-use covenant within 30 days of submittal by DTSC. DTSC to execute and return the land-use covenant within 30 days of submittal by PG&E.

		PG&E to record the fully executed land-use covenant with the County Recorder's Office within 15 days of receipt from DTSC. PG&E to provide a copy of the recorded final land-use covenant bearing the seal of the County Recorder's Office to DTSC within 15 days of its recording.

5.0 CORRECTIVE MEASURES IMPLEMENTATION (CMI)

5.1. Respondent has elected to prepare separate CMI Workplans for one or more remedy elements. The CMI Workplan are subject to approval by DTSC and shall be developed in a manner consistent with the Scope of Work for Corrective Measures Implementation contained in Attachment Number 2. The CMI Workplan for CM2 element 2 (circulation system) has been approved and is being implemented (see paragraph 2.11). The CMI Workplan for CM element 3 (groundwater monitoring) has been submitted and is currently under review by DTSC (see paragraph 2.12).

5.2. Concurrent with the submission of a CMI Workplan, Respondent shall submit to DTSC a Health and Safety Plan in accordance with Attachment Number 1.

5.3. The CMI program shall be designed to facilitate the design, construction, operation, maintenance, and monitoring of corrective measures at the Facility in accordance with the approved remedies selected for this site. In accordance with the schedule contained in the approved CMI Workplan, Respondent shall submit to DTSC the documents listed below, to the extent applicable. These documents shall be developed in a manner consistent with the Scope of Work for Corrective Measures Implementation contained in Attachment Number 2.

1. Operation and Maintenance Plan
2. Construction Workplan
3. Construction Completion Report
4. Corrective Measures Completion Report

5.4. DTSC will review all required CMI documents and notify Respondent in writing of DTSC's approval or disapproval.

5.5. As directed by DTSC, within 120 days of DTSC's approval of all required CMI documents, Respondent shall establish a financial assurance mechanism for Corrective Measures Implementation. The financial assurance mechanisms may

include a performance or surety bond, liability insurance, an escrow performance guarantee account, a trust fund, financial test, or corporate guarantee as described in California Code of Regulations, title 22, section 66265.143, or any other mechanism acceptable to DTSC. The mechanism shall be established to allow DTSC access to the funds to undertake Corrective Measures Implementation tasks if Respondent is unable or unwilling to undertake the required actions.

6.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT

6.1 DTSC must comply with the California Environmental Quality Act (CEQA) insofar as activities required by this Consent Agreement are projects subject to CEQA. Respondent shall provide all information necessary to facilitate any CEQA analysis. DTSC will make an initial determination regarding the applicability of CEQA. If the activities are not exempt from CEQA, DTSC will conduct an Initial Study. Based on the results of the Initial Study, DTSC will determine if a

Negative Declaration or an Environmental Impact Report (EIR) should be prepared. DTSC will prepare and process any such Negative Declaration. However, should DTSC determine that an EIR is necessary, such an EIR would be prepared under a separate agreement between DTSC and Respondent.

7.0 DTSC APPROVAL

7.0. Respondent shall revise any workplan, report, specification, or schedule in accordance with DTSC's written comments. Respondent shall submit to DTSC any revised documents by the due date specified by DTSC. Revised submittals are subject to DTSC's approval or disapproval.

7.1. Upon receipt of DTSC's written approval, Respondent shall commence work and implement any approved workplan in accordance with the schedule and provisions contained therein.

7.2. Any DTSC-approved workplan, report, specification, or schedule required under this Consent Agreement shall be deemed incorporated into this Consent Agreement.

7.3. Verbal advice, suggestions, or comments given by DTSC representatives will not constitute an official approval or decision.

8.0 SUBMITTALS

8.1. Beginning with the first full month following the effective date of this Consent Agreement, Respondent shall provide DTSC with quarterly progress reports of corrective action activities conducted pursuant to this Consent Agreement.

Progress reports are due on the 15th day of the first month following the close of each reporting period. The progress reports shall conform to the Scope of Work for Progress Reports contained in Attachment 2.G. DTSC may adjust the frequency of progress reporting to be consistent with site-specific activities.

8.2. Any report or other document submitted by Respondent pursuant to this Consent Agreement shall be signed and certified by the project coordinator, a responsible corporate officer, or a duly authorized representative.

8.3. The certification required by paragraph 8.2 above, shall be in the following form:

I certify that the information contained in or accompanying this submittal is true, accurate, and complete. As to those portions of this submittal for which I cannot personally verify the accuracy, I certify that this submittal and all attachments were prepared at my direction in accordance with procedures designed to assure that qualified personnel properly gathered and evaluated the information submitted.

Signature: _____

Printed Name: _____

Title: _____

Date: _____

8.4. Copies of workplans, reports, and correspondence shall be provided on Compact Disk in Adobe Acrobat format and/or additional electronic formats as may be specified by DTSC. Respondent shall directly mail copies to the following distribution list:

1. Mr. Bruce Wolfe
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1500
Oakland, CA 94612

2. Mr. Brad Boschetto
Health, Safety, and Equipment
Shell Oil Products Company
P.O. Box 219
Lake Forest, CA 92609-0219

3. Mr. Mike Rugg
Department of Fish and Game, Region 3
P.O. Box 47
Yountville, CA 94599

4. Ms. Dena Hutchin
Contra Costa County Health Services
Environmental Health Division
2120 Diamond Boulevard, Suite 200
Concord, CA 94520

5. Mr. Salvatore Ciriello
Supervising Hazardous Substances Engineer
Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, CA 94710

6. Dr. Robert Ellgas
Shaw Environmental Inc
4005 Port Chicago Highway
Concord, CA 94520-1120

8.5. Unless otherwise specified, all reports, correspondence, approvals, disapprovals, notices, or other submissions relating to this Consent Agreement shall be in writing and shall be sent to the current Project Coordinators.

9.0 PROPOSED CONTRACTOR/CONSULTANT

9.1 All work performed pursuant to this Consent Agreement shall be under the direction and supervision of a professional engineer or registered geologist, registered in California, with expertise in hazardous waste site cleanup. Respondent's contractor or consultant shall have the technical expertise sufficient to fulfill his or her responsibilities. Within 14 days of the effective date of this Consent Agreement, Respondent shall notify DTSC Project Coordinator in writing of the name, title, and qualifications of the professional engineer or registered geologist and of any contractors or consultants to be used in carrying out the terms of this Consent Agreement. If there is a change in personnel, the Respondent shall notify DTSC in writing within 30 days of such a change.

10.0 ADDITIONAL WORK

10.1 DTSC may determine or Respondent may propose that certain tasks, including investigatory work, engineering evaluation, or procedure/methodology modifications are necessary in addition to, or in lieu of, the tasks and deliverables included in any part of DTSC-approved workplans. DTSC shall request in writing that Respondent perform the additional work and shall specify the basis and reasons for DTSC's determination that the additional work is necessary. Within 14 days after the receipt of such determination, Respondent may confer with DTSC to discuss the additional work DTSC has requested. If required by DTSC, Respondent shall submit to DTSC a workplan for the

additional work. Such workplan shall be submitted to DTSC within 30 days of receipt of DTSC's determination or according to an alternate schedule established by DTSC. Upon approval of a workplan, Respondent shall implement it in accordance with the provisions and schedule contained therein. The need for, and disputes concerning additional work are subject to the dispute resolution procedures specified in this Consent Agreement.

11.0 QUALITY ASSURANCE

11.1. All sampling and analyses performed by Respondent under this Consent Agreement shall follow applicable DTSC and U.S. EPA guidance for sampling and analysis. Workplans shall contain quality assurance/quality control and chain of custody procedures for all sampling, monitoring, and analytical activities. Any deviations from the approved workplans must be approved by DTSC prior to implementation, must be documented, including reasons for the deviations, and must be reported in the applicable report.

11.2. Respondent shall submit to DTSC the names, addresses, and telephone numbers of the California State certified analytical laboratories that the Respondent proposes to use within 14 days of implementing applicable workplans.

12.0 SAMPLING AND DATA/DOCUMENT AVAILABILITY

12.1. Respondent shall submit to DTSC upon request the results of all sampling and/or tests or other data generated by its employees, agents, consultants, or contractors pursuant to this Consent Agreement.

12.2. Respondent shall notify DTSC in writing at least seven days prior to beginning each separate phase of field work approved under any workplan required by this Consent Agreement. If Respondent believes it must commence emergency field activities without delay, Respondent may seek emergency telephone authorization from DTSC Project Coordinator or, if the Project Coordinator is unavailable, his/her Branch Chief, to commence such activities immediately.

12.3. At the request of DTSC, Respondent shall provide or allow DTSC or its authorized representative to take split or duplicate samples of all samples collected by Respondent pursuant to this Consent Agreement. Similarly, at the request of Respondent, DTSC shall allow Respondent or its authorized representative to take split or duplicate samples of all samples collected by DTSC under this Consent Agreement.

13.0 ACCESS

13.1 Subject to the Facility's security and safety procedures, Respondent agrees to provide DTSC and its representatives access at all reasonable times to the

Facility and will make its best efforts to gain access to off-site property to which access is required for implementation of this Consent Agreement. Respondent shall permit such persons to inspect and copy all records, files, photographs, documents, including all sampling and monitoring data, that pertain to work undertaken pursuant to this Consent Agreement and that are within the possession or under the control of Respondent or its contractors or consultants.

14.0 RECORD PRESERVATION

14.1. Respondent shall retain, during the pendency of this Consent Agreement and for a minimum of six years after its termination, all data, records, and documents that relate in any way to the performance of this Consent Agreement or to hazardous waste management and/or disposal at the Facility. Respondent shall notify DTSC in writing 90 days prior to the destruction of any such records, and shall provide DTSC with the opportunity to take possession of any such records. Such written notification shall reference the effective date, caption, and docket number of this Consent Agreement and shall be addressed to:

Branch Chief
Standardized Permits and Corrective Action Branch
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721

14.2. If Respondent retains or employs any agent, consultant, or contractor for the purpose of carrying out the terms of this Consent Agreement, Respondent will require any such agents, consultants, or contractors to provide Respondent a copy of all documents produced pursuant to this Consent Agreement.

14.3. All documents pertaining to this Consent Agreement shall be stored in a central location at the Facility, or at a location otherwise agreed to by the parties, to afford easy access by DTSC and its representatives.

15.0 DISPUTE RESOLUTION

15.1. The parties agree to use their best efforts to resolve all disputes informally. The parties agree that the procedures contained in this section are the sole administrative procedures for resolving disputes arising under this Consent Agreement. If Respondent fails to follow the procedures contained in this section, it shall have waived its right to further consideration of the disputed issue.

15.2. If Respondent disagrees with any written decision by DTSC pursuant to this Consent Agreement, Respondent's Project Coordinator shall orally notify DTSC's Project Coordinator of the dispute. The Project Coordinators shall attempt to resolve the dispute informally.

15.3. If the Project Coordinators cannot resolve the dispute informally, Respondent may pursue the matter formally by placing its objection in writing. Respondent's written objection must be forwarded to Chief, Standardized Permits and Corrective Action Branch, Department of Toxic Substances Control, with a copy to DTSC's Project Coordinator. The written objection must be mailed to the Branch Chief within 14 days of Respondent's receipt of DTSC's written decision. Respondent's written objection must set forth the specific points of the dispute and the basis for Respondent's position.

15.4. DTSC and Respondent shall have 14 days from DTSC's receipt of Respondent's written objection to resolve the dispute through formal discussions. This period may be extended by DTSC for good cause. During such period, Respondent may meet or confer with DTSC to discuss the dispute.

15.5. After the formal discussion period, DTSC will provide Respondent with its written decision on the dispute. DTSC's written decision will reflect any agreements reached during the formal discussion period and be signed by the Branch Chief or his/her designee.

15.6. During the pendency of all dispute resolution procedures set forth above, the time periods for completion of work required under this Consent Agreement that are affected by such dispute shall be extended for a period of time not to exceed the actual time taken to resolve the dispute. The existence of a dispute shall not excuse, toll, or suspend any other compliance obligation or deadline required pursuant to this Consent Agreement.

16.0 RESERVATION OF RIGHTS

16.1. DTSC reserves all of its statutory and regulatory powers, authorities, rights, and remedies, which may pertain to Respondent's failure to comply with any of the requirements of this Consent Agreement. Respondent reserves all of its statutory and regulatory rights, defenses and remedies, as they may arise under this Consent Agreement. This Consent Agreement shall not be construed as a covenant not to sue, release, waiver, or limitation on any powers, authorities, rights, or remedies, civil or criminal, that DTSC or Respondent may have under any laws, regulations or common law.

16.2. DTSC reserves the right to disapprove of work performed by Respondent pursuant to this Consent Agreement and to request that Respondent perform additional tasks.

16.3. DTSC reserves the right to perform any portion of the work consented to herein or any additional site characterization, feasibility study, and/or remedial actions it deems necessary to protect human health and/or the environment. DTSC may exercise its authority under any applicable state or federal law or regulation to undertake response actions at any time. DTSC reserves its right to seek

reimbursement from Respondent for costs incurred by the State of California with respect to such actions. DTSC will notify Respondent in writing as soon as practicable regarding the decision to perform any work described in this section.

16.4. If DTSC determines that activities in compliance or noncompliance with this Consent Agreement have caused or may cause a release of hazardous waste and/or hazardous waste constituents, or a threat to human health and/or the environment, or that Respondent is not capable of undertaking any of the work required, DTSC may order Respondent to stop further implementation of this Consent Agreement for such period of time as DTSC determines may be needed to abate any such release or threat and/or to undertake any action which DTSC determines is necessary to abate such release or threat. The deadlines for any actions required of Respondent under this Consent Agreement affected by the order to stop work shall be extended to take into account DTSC's actions.

16.5. This Consent Agreement is not intended to be nor shall it be construed to be a permit. This Consent Agreement is not a substitute for, and does not preclude DTSC from requiring, any hazardous waste facility permit, post closure permit, closure plan or post closure plan. The parties acknowledge and agree that DTSC's approval of any workplan, plan, and/or specification does not constitute a warranty or representation that the workplans, plans, and/or specifications will achieve the required cleanup or performance standards. Compliance by Respondent with the terms of this Consent Agreement shall not relieve Respondent of its obligations to comply with the Health and Safety Code or any other applicable local, state, or federal law or regulation.

17.0 OTHER CLAIMS

17.1 Except as provided in this Consent Agreement, nothing in this Consent Agreement shall constitute or be construed as a release by DTSC or Respondent from any claim, cause of action, or demand in law or equity against any person, firm, partnership, or corporation for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous constituents, hazardous substances, hazardous wastes, pollutants, or contaminants found at, taken to, or taken or migrating from the Facility.

18.0 COMPLIANCE WITH WASTE DISCHARGE REQUIREMENTS

18.1 Respondent shall comply with all applicable waste discharge requirements issued by the State Water Resources Control Board or a California regional water quality control board.

19.0 OTHER APPLICABLE LAWS

19.1 All actions required by this Consent Agreement shall be conducted in

accordance with the requirements of all local, state, and federal laws and regulations. Respondent shall obtain or cause its representatives to obtain all permits and approvals necessary under such laws and regulations.

20.0 REIMBURSEMENT OF DTSC'S COSTS

20.1. Respondent shall pay DTSC's costs incurred in the implementation of this Consent Agreement. Such costs include DTSC's costs incurred in the preparation and implementation of this Consent Agreement prior to the effective date of this Consent Agreement.

20.2. An estimate of DTSC's costs is attached as Exhibit A showing the amount of $50,618. It is understood by the parties that this amount is only a cost estimate for the activities shown on Exhibit A and it may differ from the actual costs incurred by DTSC in overseeing these activities or in implementing this Consent Agreement. DTSC will provide additional cost estimates to Respondent as the work progresses under the Consent Agreement.

20.3. DTSC will provide Respondent with a billing statement at least quarterly, which will include the name(s) of the employee(s), identification of the activities, the amount of time spent on each activity, and the hourly rate charged. If Respondent does not pay an invoice within 60 days of the date of the billing statement, the amount is subject to interest as provided by Health and Safety Code section 25360.1.

20.4. DTSC will retain all costs records associated with the work performed under this Consent Agreement as required by state law. DTSC will make all documents that support the DTSC's cost determination available for inspection upon request, as provided by the Public Records Act.

20.5. Any dispute concerning DTSC's costs incurred pursuant to this Consent Agreement is subject to the Dispute Resolution provision of this Consent Agreement and the dispute resolution procedures as established pursuant to Health and Safety Code section 25269.2. DTSC reserves its right to recover unpaid costs under applicable state and federal laws.

20.6. All payments shall be made within 30 days of the date of the billing statement by check payable to the Department of Toxic Substances Control and shall be sent to:

Accounting Unit
Department of Toxic Substances Control
P. O. Box 806
Sacramento, California 95812-0806

All checks shall reference the name of the Facility, the Respondent's name and

address, and the docket number of this Consent Agreement.

21.0 MODIFICATION

21.1. This Consent Agreement may be modified by mutual agreement of the parties. Any agreed modification shall be in writing, shall be signed by both parties, shall have as its effective date the date on which it is signed by all the parties, and shall be deemed incorporated into this Consent Agreement.

21.2. Any requests for revision of an approved workplan requirement must be in writing. Such requests must be timely and provide justification for any proposed workplan revision. DTSC has no obligation to approve such requests, but if it does so, such approval will be in writing and signed by the Chief, Standardized Permits and Corrective Action Branch, Department of Toxic Substances Control, or his or her designee. Any approved workplan revision shall be incorporated by reference into this Consent Agreement.

21.3 In the event an inconsistency exists between the language of this Consent Agreement and its attachments, the language of the Consent Agreement shall control.

22.0 TERMINATION AND SATISFACTION

22.1 The provisions of this Consent Agreement shall be deemed satisfied upon the execution by both parties of an Acknowledgment of Satisfaction (Acknowledgment). DTSC will prepare the Acknowledgment for Respondent's signature. The Acknowledgment will specify that Respondent has demonstrated to the satisfaction of DTSC that the terms of this Consent Agreement including payment of DTSC's costs have been satisfactorily completed. The Acknowledgment will affirm Respondent's continuing obligation to preserve all records after the rest of the Consent Agreement is satisfactorily completed.

23.0 EFFECTIVE DATE

23.1 The effective date of this Consent Agreement shall be the date on which this Consent Agreement is signed by all the parties. Except as otherwise specified, "days" means calendar days.

24.0 SIGNATORIES

24.1 Each undersigned representative certifies that he or she is fully authorized to enter into this Consent Agreement.

DATE: 1/13/04 BY: //original signed by//

Robert L. Harris, Vice President
Environmental Affairs

DATE: 1/22/04 BY: //original signed by//

Mohinder S. Sandhu, P.E. ,Chief
Standardized Permitting and Corrective Action Branch
Department of Toxic Substances Control

ATTACHMENT NUMBER 1

SCOPE OF WORK FOR A HEALTH AND SAFETY PLAN

Objectives
Describe the goals and objectives of the Health and Safety Plan (must apply to on-site personnel and visitors). The Health and Safety Plan must be consistent with the facility Contingency Plan, OSHA Regulations, NIOSH Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (1985), all state and local regulations and other Implementing Agency guidance as provided.

Hazard Assessment
List and describe the potentially hazardous substances that could be encountered by field personnel during different phases of the activities.

Discuss the following:

- Inhalation Hazards
- Dermal Exposure
- Ingestion Hazards
- Physical Hazards
- Overall Hazard Rating

Include a table that, at a minimum, lists: Known Contaminants, Highest Observed Concentration, Media, and Symptoms/Effects of Acute Exposure.

Personal Protection/Monitoring Equipment
For each task, describe personal protection levels and identify all monitoring equipment. Describe any action levels and corresponding response actions (i.e., when will levels of safety be upgraded). Describe decontamination procedures and areas.

Site Organization and Emergency Contacts
List and identify all contacts (include phone numbers). Identify the nearest hospital and provide a regional map showing the shortest route from the facility to the hospital. Describe site emergency procedures and any site safety organizations. Include evacuation procedures for neighbors (where applicable).

Include facility Map showing emergency station locations (e.g., first aid, eye wash areas, etc.).

The Health and Safety Plan shall be signed by a Certified Industrial Hygienist.

ATTACHMENT NUMBER 2

SCOPE OF WORK FOR CORRECTIVE MEASURES IMPLEMENTATION

PURPOSE

The purpose of the Corrective Measures Implementation (CMI) program is to design, construct, operate, maintain and monitor the performance of the corrective measure or measures selected by the Department. Corrective measures are intended to protect human health and/or the environment from hazardous waste releases from the Facility. The Owner/Operator or Respondent will furnish all personnel, materials and services necessary to implement the corrective measures program.

SCOPE

The documents required for Corrective Measures Implementation are, unless the Department of Toxic Substances Control (Department) specifies otherwise, a Conceptual Design, Operation and Maintenance Plan, Draft Plans and Specifications, Final Plans and Specifications, Construction Workplan, Construction Completion Report, Corrective Measure Completion Report, Health and Safety Plan and Progress Reports. The scope of work (SOW) for each document is specified below. The SOW's are intended to be flexible documents capable of addressing both simple and complex site situations. If the Owner/Operator or Respondent can justify, to the satisfaction of the Department, that a plan and/or report or portions thereof are not needed in the given site specific situation, then the Department may waive that requirement.

The Department may require the Owner/Operator or Respondent to conduct additional studies beyond what is discussed in the SOW's in order to support the CMI program. The Owner/Operator or Respondent will furnish all personnel, materials and services necessary to conduct the additional tasks.

A. Conceptual Design

The Owner/Operator or Respondent shall prepare a Conceptual Design (CD) that clearly describes the size, shape, form, and content of the proposed corrective measure, the key components or elements that are needed, describes the designer's vision of the corrective measure in the form of conceptual drawings and schematics, and includes procedures and schedules for implementing the corrective measure(s).

It should be noted that more that one conceptual design may be needed in situations where there is a complex site with multiple technologies being employed at different locations. The CD must be approved by the Department prior to implementation. The CD must, at a minimum, include the following elements:

1. Introduction/Purpose

Describe the purpose of the document and provide a summary description of the project.

2 Corrective Measure Objectives

Discuss the corrective measure objectives including applicable media cleanup standards.

3. Conceptual Model of Contaminant Migration

It is important to know where the contaminants are and to understand how they are moving before an adequate corrective measure can be developed. To address this critical question, the Owner/Operator or Respondent must present a conceptual model of the site and contaminant migration. The conceptual model consists of a working hypothesis of how the contaminants may move from the release source to the receptor population. The conceptual model is developed by looking at the applicable physical parameters (e.g., water solubility, density, Henry's Law Constant, etc.) for each contaminant and assessing how the contaminant may migrate given the existing site conditions (geologic features, depth to groundwater, etc.). Describe the phase (water, soil, gas, non-aqueous) and location where contaminants are likely to be found. This analysis may have already been done as part of earlier work (e.g., Current Conditions Report). If this is the case, then provide a summary of the conceptual model with a reference to the earlier document.

4. Description of Corrective Measures

Considering the conceptual model of contaminant migration, qualitatively describe what the corrective measure is supposed to do and how it will function at the Facility. Discuss the constructability of the corrective measure and its ability to meet the corrective measure objectives.

5. Data Sufficiency

Review existing data needed to support the design effort and establish whether or not there are sufficient accurate data available for this purpose. The Owner/Operator or Respondent must summarize the assessment findings and specify any additional data needed to complete the corrective measure design. The Department may require or the Owner/Operator or Respondent may propose that sampling and analysis plans and/or treatability study workplans be developed to obtain the additional data. Submittal times for any new sampling and analysis plans

and/or treatability study workplans must be included in the project schedule.

6. Project Management

   Describe the management approach including levels of authority and responsibility (include organization chart), lines of communication and the qualifications of key personnel who will direct the corrective measure design and implementation effort (including contractor personnel).

7. Project Schedule

   The project schedule must specify all significant steps in the process and when all CMI deliverables (e.g., Operation and Maintenance Plan, Corrective Measure Construction Workplan, etc.) are to be submitted to the Department.

8. Design Criteria

   Specify performance requirements for the overall corrective measure and for each major component. The Owner/Operator or Respondent must select equipment that meets the performance requirements.

9. Design Basis

   Discuss the process and methods for designing all major components of the corrective measure. Discuss the significant assumptions made and possible sources of error. Provide justification for the assumptions;

10. Conceptual Process/Schematic Diagrams.

11. Site plan showing preliminary plant layout and/or treatment area.

12. Tables listing number and type of major components with approximate dimensions.

13. Tables giving preliminary mass balances.

14. Site safety and security provisions (e.g., fences, fire control, etc.).

15. Waste Management Practices

    Describe the wastes generated by the construction of the corrective measure and how they will be managed. Also discuss drainage and indicate how rainwater runoff will be managed;

16. Required Permits

List and describe the permits needed to construct and operate the corrective measure. Indicate on the project schedule when the permit applications will be submitted to the applicable agencies and an estimate of the permit issuance date.

17. Long-Lead Procurement Considerations

The Owner/Operator or Respondent shall prepare a list of any elements or components of the corrective measure that will require custom fabrication or for some other reason must be considered as long-lead procurement items. The list must include the reason why the items are considered long-lead items, the length of time necessary for procurement, and recognized sources of such procurement;

18. Appendices including:

Design Data - Tabulations of significant data used in the design effort;

Equations - List and describe the source of major equations used in the design process;

Sample Calculations - Present and explain one example calculation for significant or unique design calculations; and

Laboratory or Field Test Results.

B. Operation and Maintenance Plan

The Owner/Operator or Respondent shall prepare an Operation and Maintenance (O&M) Plan that includes a strategy and procedures for performing operations, long term maintenance, and monitoring of the corrective measure. A draft Operation and Maintenance Plan shall be submitted to the Department simultaneously with the draft Plans and Specifications. A final Operation and Maintenance Plan shall be submitted to the Department simultaneously with the final Plans and Specifications. The O&M plan shall, at a minimum, include the following elements:

1. Introduction/Purpose
Describe the purpose of the document and provide a summary description of the project.

2. Project Management
Describe the management approach including levels of authority and

responsibility (include organization chart), lines of communication and the qualifications of key personnel who will operate and maintain the corrective measures (including contractor personnel);

3. System Description

   Describe the corrective measure and identify significant equipment.

4. Personnel Training

   Describe the training process for O&M personnel. The Owner/Operator or Respondent shall prepare, and include in the technical specifications governing treatment systems, contractor requirements for providing: appropriate service visits by experienced personnel to supervise the installation, adjustment, start up and operation of the treatment systems, and training covering appropriate operational procedures once the start-up has been successfully accomplished.

5. Start-Up Procedures

   Describe system start-up procedures including any operational testing.

6. Operation and Maintenance Procedures

   Describe normal operation and maintenance procedures including:

   a. Description of tasks for operation;
   b. Description of tasks for maintenance;
   c. Description of prescribed treatment or operation conditions; and
   d. Schedule showing frequency of each O&M task

7. Replacement schedule for equipment and installed components.

8. Waste Management Practices

   Describe the wastes generated by operation of the corrective measure and how they will be managed. Also discuss drainage and indicate how rainwater runoff will be managed.

9. Sampling and monitoring activities may be needed for effective operation and maintenance of the corrective measure. If sampling activities are necessary, the O&M plan must include a complete sampling and analysis section which specifies the following information:

   a. Description and purpose of monitoring tasks;
   b. Data quality objectives;

c. Analytical test methods and detection limits;
d. Name of analytical laboratory;
e. Laboratory quality control (include laboratory QA/QC procedures in appendices)
f. Sample collection procedures and equipment;
g. Field quality control procedures:
   - duplicates (10% of all field samples)
   - blanks (field, equipment, etc.)
   - equipment calibration and maintenance
   - equipment decontamination
   - sample containers
   - sample preservation
   - sample holding times (must be specified)
   - sample packaging and shipment
   - sample documentation (field notebooks, sample labeling, etc);
h. Criteria for data acceptance and rejection; and
i. Schedule of monitoring frequency.

The Owner/Operator or Respondent shall follow all EPA guidance for sampling and analysis. The Department may request that the sampling and analysis section be a separate document.

10. Corrective Measure Completion Criteria

Describe the process and criteria (e.g., groundwater cleanup goal met at all compliance points for 1 year) for determining when corrective measures may cease. Also describe the process and criteria for determining when maintenance and monitoring may cease. Criteria for corrective measures such as a landfill cap must be carefully crafted to account for the fact that a landfill cap will never actually "cease" but will need to be maintained and monitored for a long period of time. Satisfaction of the completion criteria will trigger preparation and submittal of the Corrective Measures Completion Report.

11. O&M Contingency Procedures:

a. Procedures to address system breakdowns and operational problems including a list of redundant and emergency back-up equipment and procedures;
b. Should the corrective measure suffer complete failure, specify alternate procedures to prevent release or threatened releases of hazardous substances, pollutants or contaminants which may endanger public health and/or the environment or exceed cleanup standards;
c. The O&M Plan must specify that, in the event of a major

breakdown and/or complete failure of the corrective measure (includes emergency situations), the Owner/Operator or Respondent will orally notify the Department within 24 hours of the event and will notify the Department in writing within 72 hours of the event. The written notification must, at a minimum, specify what happened, what response action is being taken and/or is planned, and any potential impacts on human health and/or the environment; and

d. Procedures to be implemented in the event that the corrective measure is experiencing major operational problems, is not performing to design specifications and/or will not achieve the cleanup goals in the expected timeframe. For example, in certain circumstances both a primary and secondary corrective measure may be selected for the Facility. If the primary corrective measure were to fail, then the secondary would be implemented. This section would thus specify that if the primary corrective measure failed, then design plans would be developed for the secondary measure.

12. Data Management and Documentation Requirements

Describe how analytical data and results will be evaluated, documented and managed, including development of an analytical database. State the criteria that will be used by the project team to review and determine the quality of data.

The O&M Plan shall specify that the Owner/Operator or Respondent collect and maintain the following information:

a. Progress Report Information

- Work Accomplishments (e.g., performance levels achieved, hours of treatment operation, treated and/or excavated volumes, concentration of contaminants in treated and/or excavated volumes, nature and volume of wastes generated, etc.).

- Record of significant activities (e.g., sampling events, inspections, problems encountered, action taken to rectify problems, etc.).

b. Monitoring and laboratory data;
c. Records of operating costs; and
d. Personnel, maintenance and inspection records.

These data and information should be used to prepare Progress Reports and the Corrective Measure Completion Report.

C. Construction Workplan

The Owner/Operator or Respondent shall prepare a Construction Workplan which documents the overall management strategy, construction quality assurance procedures and schedule for constructing the corrective measure. A draft Construction Workplan shall be submitted to the Department simultaneously with the draft Plans and Specifications and draft Operation and Maintenance Plan. A final Construction Workplan shall be submitted to the Department simultaneously with the final Plans and Specifications and final Operation and Maintenance Plan. Upon receipt of written approval from the Department, the Owner/Operator or Respondent shall commence the construction process and implement the Construction Workplan in accordance with the schedule and provisions contained therein. The Construction Workplan must be approved by the Department prior to the start of corrective measure construction. The Construction Workplan must, at a minimum, include the following elements:

1. Introduction/Purpose

   Describe the purpose of the document and provide a summary description of the project.

2. Project Management

   Describe the construction management approach including levels of authority and responsibility (include organization chart), lines of communication and the qualifications of key personnel who will direct the corrective measure construction effort and provide construction quality assurance/quality control (including contractor personnel);

3. Project Schedule

   The project schedule must include timing for key elements of the bidding process, timing for initiation and completion of all major corrective measure construction tasks as specified in the Final Plans and Specifications, and specify when the Construction Completion Report is to be submitted to the Department;

4. Construction Quality Assurance/Quality Control Program

   The purpose of construction quality assurance is to ensure, with a reasonable degree of certainty, that a completed corrective measure will meet or exceed all design criteria, plans and specifications. The Construction Workplan must include a complete construction quality assurance program to be implemented by the Owner/Operator or

Respondent.

5. Waste Management Procedures

Describe the wastes generated by construction of the corrective measure and how they will be managed.

6. Sampling and Analysis

Sampling and monitoring activities may be needed for construction quality assurance/quality control and/or other construction related purposes. If sampling activities are necessary, the Construction Workplan must include a complete sampling and analysis section which specifies the following information:

a. Description and purpose of monitoring tasks;
b. Data quality objectives;
c. Analytical test methods and detection limits;
d. Name of analytical laboratory;
e. Laboratory quality control (include laboratory QA/QC procedures in appendices)
f. Sample collection procedures and equipment;
g. Field quality control procedures:
   - duplicates (10% of all field samples)
   - blanks (field, equipment, etc.)
   - equipment calibration and maintenance
   - equipment decontamination
   - sample containers
   - sample preservation
   - sample holding times (must be specified)
   - sample packaging and shipment
   - sample documentation (field notebooks, sample labeling, etc);
h. Criteria for data acceptance and rejection; and
i. Schedule of monitoring frequency.

The Owner/Operator or Respondent shall follow all Department and USEPA guidance for sampling and analysis. The Department may request that the sampling and analysis section be a separate document.

7. Construction Contingency Procedures

a. Changes to the design and/or specifications may be needed during construction to address unforeseen problems encountered in the field. Procedures to address such circumstances, including notification of the Department, must be included in the Construction Workplan;

b. The Construction Workplan must specify that, in the event of a construction emergency (e.g., fire, earthwork failure, etc.), the Owner/Operator or Respondent will orally notify the Department within 24 hours of the event and will notify the Department in writing within 72 hours of the event. The written notification must, at a minimum, specify what happened, what response action is being taken and/or is planned, and any potential impacts on public health and/or the environment; and

c. Procedures must be implemented if unforeseen events prevent corrective measure construction. For example, in certain circumstances both a primary and secondary corrective measure may be selected for the Facility. If the primary corrective measure could not be constructed, then the secondary would be implemented. This section would thus specify that if the primary corrective measure could not be constructed, then design plans would be developed for the secondary measure.

8. Construction safety procedures should be specified in a separate Health and Safety Plan.

9. Data Management and Documentation Requirements

Describe how analytical data and results will be evaluated, documented and managed, including development of an analytical database. State the criteria that will be used by the project team to review and determine the quality of data.

The Construction Workplan shall specify that the Owner/Operator or Respondent collect and maintain the following information:

a. Progress Report Information

- Work Accomplishments (e.g., hours of operation, excavated volumes, nature and volume of wastes generated, area of cap completed, length of trench completed, etc.).

- Record of significant activities (e.g., sampling events, inspections, problems encountered, action taken to rectify problems, etc.).

b. Monitoring and laboratory data;
c. Records of construction costs; and
d. Personnel, maintenance and inspection records. This data and information should be used to prepare progress reports and the

Construction Completion Report.

10. Cost Estimate/Financial Assurance

If financial assurance for corrective measure construction and operation is required by an enforcement order, facility permit, or through use of Department discretion, the Construction Workplan must include a cost estimate, specify which financial mechanism will be used and when the mechanism will be established. The cost estimate shall include both construction and operation and maintenance costs. An initial cost estimate shall be included in the draft Construction Workplan and a final cost estimate shall be included in the final Construction Workplan. The financial assurance mechanism may include a performance or surety bond, a trust fund, a letter of credit, financial test and corporate guarantee equivalent to that in 40 CFR 265.143 or any other mechanism acceptable to the Department.

Financial assurance mechanisms are used to assure the Department that the Owner/Operator or Respondent has adequate financial resources to construct and operate the corrective measure.

D. *Construction Completion Report*

The Owner/Operator or Respondent shall prepare a Construction Completion (CC) Report which documents how the completed project is consistent with the Final Plans and Specifications. A CC Report shall be submitted to the Department when the construction and any operational tests have been completed. The CC Report shall, at a minimum, include the following elements:

1. Purpose;

2. Synopsis of the corrective measure, design criteria, and certification that the corrective measure was constructed in accordance with the Final Plans and Specifications;

3. Explanation and description of any modifications to the Final Plans and Specifications and why these were necessary for the project;

4. Results of any operational testing and/or monitoring, indicating how initial operation of the corrective measure compares to the design criteria;

5. Summary of significant activities that occurred during construction. Include a discussion of problems encountered and how they were addressed;

6. Summary of any inspection findings (include copies of key inspection documents in appendices);

7. As built drawings; and

8. A schedule indicating when any treatment systems will begin full scale operations.

E. Corrective Measure Completion Report

The Owner/Operator or Respondent shall prepare a Corrective Measure Completion (CMC) Report when the Owner/Operator or Respondent believes that the corrective measure completion criteria have been satisfied. The purpose of the CMC Report is to fully document how the corrective measure completion criteria have been satisfied and to justify why the corrective measure and/or monitoring may cease. The CMC Report shall, at a minimum, include the following elements:

1. Purpose;

2. Synopsis of the corrective measure;

3. *Corrective Measure Completion Criteria*

   Describe the process and criteria for determining when corrective measures, maintenance and monitoring may cease. Corrective measure completion criteria were given in the final Operation and Maintenance (O&M) Plan;

4. Demonstration that the completion criteria have been met. Include results of testing and/or monitoring, indicating how operation of the corrective measure compares to the completion criteria;

5. Summary of work accomplishments (e.g., performance levels achieved, total hours of treatment operation, total treated and/or excavated volumes, nature and volume of wastes generated, etc.);

6. Summary of significant activities that occurred during operations. Include a discussion of problems encountered and how they were addressed;

7. Summary of inspection findings (include copies of key inspection documents in appendices); and

8. Summary of total operation and maintenance costs.

F. Health and Safety Plan

The Owner/Operator or Respondent must prepare a Health and Safety Plan for

construction, operation and maintenance of the corrective measure. The Health and Safety Plan will not be approved by the Department. The Health and Safety Plan must, at a minimum, include the following elements:

1. Objectives

   Describe the goals and objectives of the Health and Safety Plan (must apply to on-site personnel and visitors). The Health and Safety Plan must be consistent with the Facility Contingency Plan, Occupational Safety and Health Administration (OSHA) Regulations, NIOSH Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (1985), all state and local regulations and other Department guidance as provided.

2. Hazard Assessment

   List and describe the potentially hazardous substances that could be encountered by field personnel during construction and/or operation and maintenance activities. Discuss the following:

   - Inhalation Hazards
   - Dermal Exposure
   - Ingestion Hazards
   - Physical Hazards
   - Overall Hazard Rating

   Include a table that, at a minimum, lists: known contaminants, highest observed concentration, media, and symptoms/effects of acute exposure.

3. Personal Protection/Monitoring Equipment

   For each operational task, describe personal protection levels and identify all monitoring equipment. Describe any action levels and corresponding response actions (i.e., when will levels of safety be upgraded). Describe decontamination procedures and areas.

4. Site Organization and Emergency Contacts

   List and identify all contacts (include phone numbers). Identify the nearest hospital and provide a regional map showing the shortest route from the facility to the hospital. Describe site emergency procedures and any site safety organizations. Include evacuation procedures for neighbors (where applicable). Include a Facility Map showing emergency station locations (first aid, eye wash areas, etc.).

G. Progress Reports

The Owner/Operator or Respondent shall provide the Department with signed quarterly progress reports during corrective measure design, construction, operation and maintenance. The Department may adjust the frequency of progress reporting to address site specific needs. For example, more frequent progress reports may be needed to track critical activities such as corrective measure construction and start-up. Progress reports must, at a minimum, include the following elements:

1. A description of significant activities and work completed during the reporting period;

2. Summary of system effectiveness. Provide a comparison of system operation to predicted performance levels (applicable only during operation of the corrective measure);

3. Summaries of all findings (including any inspection results);

4. Summaries of all contacts with representatives of the local community, public interest groups or State government during the reporting period;

5. Summaries of all problems or potential problems encountered during the reporting period;

6. Actions being taken and/or planned to rectify problems;

7. Changes in personnel during the reporting period;

8. Projected work for the next reporting period; and

9. If requested by the Department, the results of any sampling tests and/or other data generated during the reporting period.

H. Submittal Summary

The following list provides a summary of when and how key documents should be submitted to the Department.

1. The submittal schedule for the documents listed below should be included in an enforcement order, permit or otherwise specified by the Department.

   - Conceptual Design

2. The submittal schedule for the documents listed below must be specified in the Conceptual Design. The groupings reflect which documents should be submitted together.

   - Draft Plans and Specifications
   - Draft Operation and Maintenance Plan
   - Draft Construction Workplan
   - Final Plans and Specifications
   - Final Operation and Maintenance Plan
   - Final Construction Workplan
   - Health and Safety Plan

3. The submittal schedule for the document listed below must be specified in the Final Construction Workplan.

   - Construction Completion Report

4. The submittal schedule for the document listed below is based on when the Owner/Operator or Respondent believes the completion criteria have been satisfied.

   - Corrective Measure Completion Report

5. The submittal schedule for Progress Reports shall be bimonthly unless otherwise specified by the Department.

COST RECOVERY ESTIMATE WORKSHEET FOR CORRECTIVE ACTION OVERSIGHT AT PACIFIC GAS ELECTRIC CO. SHELL POND/CARBON PILE PROPERTY

ASK #	MILESTONE/TASK	SPCAB STAFF						GEOLOGIC STAFF				PUBLIC PARTICIPATION				LEGAL		TOTAL HOURS	TOTAL ESTIMATED COST
		HSE		SUP. HSE I		SUP. HSE II		HSEG		SUP. HSEG I		PUBLIC PARTICIPATION SPECIALIST		PUBLIC PARTICIPATION SUPERVISOR		STAFF COUNSEL			
		Rate= $111		Rate= $121		Rate= $133		Rate= $111		Rate= $133		Rate= $84		Rate= $107		Rate= $138			
		(Class Code: 3728)		(Class Code: 3724)		(Class Code: 3723)		(Class Code: 3728)		(Class Code: 3730)		(Class Code: 5373)		(Class Code: 5372)		(Class Code: 5778)			
		HRS	TOTAL	HRS	TOTAL	HRS	TOTAL	HRS	TOTAL	HRS	TOTAL	HRS	TOTAL	HRS	TOTAL	HRS	TOTAL		
	Site Revegetation - Oversight	16.00	$1,776.00	4.00	$484.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00	20.00	$2,260.00
	Levee Maintenance - Oversight	16.00	$1,776.00	4.00	$484.00		$0.00	16.00	$1,776.00		$0.00		$0.00		$0.00		$0.00	36.00	$4,036.00
	Groundwater Monitoring - Plan Review and Approval	16.00	$1,776.00	4.00	$484.00		$0.00	32.00	$3,552.00		$0.00		$0.00		$0.00		$0.00	52.00	$5,812.00
	Verification Groundwater Monitoring Reports - Review	16.00	$1,776.00	8.00	$968.00		$0.00	40.00	$4,440.00		$0.00		$0.00		$0.00		$0.00	64.00	$7,184.00
	Land Use Covenant - Preparation	40.00	$4,440.00	24.00	$2,904.00	8.00	$1,064.00									40.00	$5,520.00	112.00	$13,928.00
	Corrective Action																		$0.00
1	Statement of Basis	40.00	$4,440.00	8.00	$968.00	0.00	$0.00	4.00	$444.00	0.00	$0.00	16.00	$1,504.00	4.00	$428.00	0.00	$0.00	72.00	$7,784.00
2	Public Notice - Draft Corrective Action Termination	8.00	$888.00	2.00	$242.00		$0.00		$0.00		$0.00	8.00	$752.00		$0.00		$0.00	18.00	$1,882.00
3	CA Termination Determination	8.00	$888.00	2.00	$242.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00	10.00	$1,130.00
	15% Contingency	24.00	$2,664.00	8.40	$1,016.40	1.20	$159.60	13.80	$1,531.80	0.00	$0.00	3.60	$338.40	0.60	$64.20	6.00	$828.00	57.60	$6,602.40
	SUBTOTAL	184.00	$20,424.00	64.40	$7,792.40	9.20	$1,223.60	105.80	$11,743.80	0.00	$0.00	27.60	$2,594.40	4.60	$492.20	46.00	$6,348.00	441.6	$50,818.40

Note: 1. Hourly rates based on FY03/04 memo from Harriet Klyen, Chief, Financial Operations Branch, DTSC. Rates include 169.18% Indirect Rate for Hazardous Waste Management Program.

Revised: 11/7/2003